

TRACT "A" OF FOREST SPRINGS TOWNHOMES
UNIT 1, CASE 9, MAP 92
LOCATED IN THE SW 1/4 OF SECTION 13,
TOWNSHIP 21 NORTH, RANGE 7 EAST, G&S.R.M.
FLAGSTAFF, COCONINO COUNTY, ARIZONA

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PER FOREST SPRINGS UNIT 2 DRAINAGE REPORT PREPARED BY AGAVE ENGINEERING, DATED 12/18/06.

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DETECTION BASIN ID	2-YEAR OUTFLOW (C.F.S.)	10-YEAR OUTFLOW (C.F.S.)	100-YEAR OUTFLOW (C.F.S.)	2-YEAR VOLUME (C- ³)	10-YEAR VOLUME (C- ³)	100-YEAR VOLUME (C- ³)	2-YEAR ELEVATION /DEPTH (FT)	10-YEAR ELEVATION /DEPTH (FT)	100-YEAR ELEVATION /DEPTH (FT)
NO. 1	1.07	6.41	24.25	8941	18248	35950	6802.21 (1.21)	6802.89 (1.89)	6804.04 (3.04)
			<u>ELEVATION (FT)</u>	<u>AREA</u>	<u>500</u>		<u>VOLUME SUM (CF)</u>		
			6801.00						
			6801.50		6864		1536		
			6802.00		12534		6315		
			6803.00		14668		19902		
			6804.00		16189		35653		
			6805.00		19850		53624		

EXISTING SITE (15.09 AC.)
TOTAL EX. IMPERVIOUS SURFACE = 0 S.F.

DEVELOPED SITE (657,320 S.F., 15.09 AC.)

NEW ROOFS = 121,665 S.F.
NEW A.C. DRIVES & CURB= 60,165 S.F.
NEW CONCRETE SIDEWALKS & PATHWAYS= 14,600 S.F.
NEW CONCRETE DRIVEWAYS = 30,100 S.F.
TOTAL DEVELOPED IMPERVIOUS SURFACE = 226,530 S.F.

RAINWATER HARVESTING REQUIREMENTS:
USE ALL NATIVE/DROUGHT TOLERANT PLANTS IN COMPLIANCE
WITH COF LANDSCAPING STANDARDS AND UTILIZE PASSIVE
RAINWATER HARVESTING.

LOW IMPACT DEVELOPMENT REQUIREMENTS:
226,530 SF (TOTAL IMP. SURFACE) \times 1/12 = 18,878 C.F.

ABSORPTION SURFACE AREA REQUIRED PER AASHTO R-18-9-A312(D):
SANDY LOAM SOIL TYPE; SAR=0.40 GAL/DAY/S.F.
PERCOLATION RATE(R)=10 MIN./IN.=0.5 FT/HR; INFILTRATION TIME(T)=24 HR.
CLOGGING FACTOR(C)=50 %; AREA REQ'D=VOL/(R x T)
AREA REQ'D=18878 CF/(0.5 FT/HR x 24 HR x 0.50)=3146 S.F.

ELEVATION (FT)	AREA (SF)	VOLUME SUM (CF)
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ELEVATION (FT)	AREA (SF)	VOLUME SUM (CF)
6801.00	3390	0
6801.50	11495	3521
6802.00	12534	9527
6803.00	14668	23114
6804.00	16859	38864
6805.00	19106	56835

NOTE: DETENTION BASIN BOTTOM WILL BE MODIFIED BY PROVIDING A EXPANDED LID BIO-RETENTION AREA AT 6801 (3390 S.F.) AND MODIFYING THE ORIGINAL BOTTOM ELEVATION AT THE OUTSIDE EDGES FROM 6802 TO 6801.50 (11495 S.F.) TO PROVIDE THE REQUIRED RCV AT THE RETAINED 2-YR WATER SURFACE ELEVATION.

PER FOREST SPRINGS UNIT 2 DRAINAGE REPORT ADDENDUM No. 1 PREPARED BY MOGOLLON ENGINEERING, DATED 6/20/13.

DETENTION BASIN ID	2-YEAR OUTFLOW (C.F.S.)	10-YEAR OUTFLOW (C.F.S.)	100-YEAR OUTFLOW (C.F.S.)	2-YEAR VOLUME (C.F.)	10-YEAR VOLUME (C.F.)	100-YEAR VOLUME (C.F.)	2-YEAR ELEVATION /DEPTH(FT)	10-YEAR ELEVATION /DEPTH(FT)	100-YEAR ELEVATION /DEPTH(FT)
NO. 1	0.13	2.49	23.42	18747	24020	42266	6802.70 (1.70)	6803.06 (2.06)	6804.20 (3.20')

LOW IMPACT DEVELOPMENT AREA PROVIDED:

<u>LID EXT. DET. BASIN #</u>	<u>VOLUME (CF)</u>	<u>DEPTH (FT.)</u>	<u>LOCATION</u>
1	18,747	1.70'	SURFACE

NOTE: A DRAINAGE REPORT ADDENDUM HAS BEEN PREPARED AND SUBMITTED TO ADDRESS FINAL LID BIO-RETENTION DESIGN AND FINAL DETENTION BASIN ROUTING DESIGN FOR EXTENDED DETENTION BASIN No. 1.

- Found 2"x 2" steel plate
- △ Found centerline monument (COF Brass Cap)
- Found A.D.O.T. alum. tablet
- Found alum. cap LS 14671
- Found plastic cap LS 11369
- Corner to be Set
- Found Alum Cap

ALL REFERENCED DOCUMENTS ARE FROM THE COCONINO COUNTY RECORDERS OFFICE.

COF DRB # 01-238